

INTRALOGISTICS.

Our solution for your business.

Electric pallet trucks. Tireless helpers for transport tasks.

Easy-to-use, extremely agile and efficient on short, medium and long-haul routes.

THE HIGHLIGHTS

- ▶ Fatigue-free operation with electric drive and outstanding user-friendliness.
- ▶ Powerful three-phase technology for up to 25 % more efficiency.
- ▶ Easy to manoeuvre in the tightest of spaces.
- ▶ Robust construction for fatigue-free operation.
- ▶ 5 truck types, from the M series entry-level models, through the compact EJE 1 to the ESE 5.



Easy and safe to manoeuvre: The safety control handle of the pedestrian trucks.



The electric low lift trucks for medium distances have stand-on platforms.



Intermediate charging at any socket: The integrated charger.

SERIES	SHORT HAUL				MEDIUM HAUL	LONG HAUL
	EJE M	EJE 1	EJE 2	EJE C20		
MODEL NAME	M13 M15	112i 114i 114 116 118 120	222 225 230 235 220r 225r	C20	ERE 1-2 120 125 225 230	ESE 1-5 120 220 320 420 430 533
AISLE WIDTH (MM)	From 1,493	From 1,762	From 1,977	From 2,322	From 1,919	From 2,197
LIFT HEIGHT (MM)	120	122	122	540	122	115-125
CAPACITY (KG)	1,300-1,500	1,200-2,000	2,000-3,500	2,000	2,000-3,000	2,000-3,300
TRAVEL SPEED (KM/H)	5	5-6	6	6	6-14	12.5-20

Individually adaptable:
from the entry level
to the high performance truck.

The ERE 120 offers
four different stand-
on platform versions
for maximum
ergonomics.

Powerful and efficient
drive concept for
maximum productivity.

LI-ION
technology



SHORT HAUL

Compact and
easy to operate:
The **EJE 120**.



EJE SERIES M

M13 | M15

Trucks are not always required to work across multiple shifts. For lighter and occasional use, our entry-level models are therefore ideal.

- ▶ For occasional use.
- ▶ Maximum manoeuvrability with short front-end length.
- ▶ Easy and fast charging thanks to on-board charger.

EJE SERIES 1

112i | 114i | 114
| 116 | 118 | 120

For transporting goods over short distances and in particularly tight warehouse environments and sales areas.

- ▶ Maximum manoeuvrability with shortest front-end length on the market.
- ▶ Up to 25 % lower energy consumption when compared to the competition.

EJE SERIES 2

220 | 225 | 230 | 235
| 220r | 225r

Effortless, efficient operation even with heavy loads thanks to modern three-phase current technology and outstanding user friendliness.

- ▶ Extremely robust for the toughest applications with heavy loads.



EJE SERIES C

C20

Perfectly suitable for use in retail shops with additional mast lift for back-friendly order picking and stacking.

- ▶ With ergonomic picking stroke.

MEDIUM HAUL



Our ERE trucks have many options for energy efficient operation.

ERE SERIES 1-2

120 | 125 | 225 | 230

For loading and unloading trucks, transporting heavy loads and picking various goods. These trucks are perfectly suitable with a folding or fixed stand-on platform.

- ▶ Robust frame for the toughest applications.
- ▶ With 14 km/h the fastest truck on the market.
- ▶ Up to 23% lower energy consumption compared to the competition.
- ▶ Best ergonomics thanks to adjustable, cushioned driver platform.

LONG HAUL



ESE SERIES 1-5

120 | 220 | 320 | 420 | 430 | 533

These electric pallet trucks are side-seaters, the position of the operator is transverse to the direction of travel. This allows maximum visibility and relaxed operation over longer distances.

- ▶ High speed and acceleration values for efficient long-haul transport.
- ▶ Maximum visibility for the operator thanks to lateral seating position.
- ▶ Electric steering for easy manoeuvring of heavy loads with few turns of the steering wheel.

Real packers in the warehouse: Electric stacker trucks.

Perfect for storage and retrieval as well as occasional order picking on short, medium and long hauls.

THE HIGHLIGHTS

- ▶ High travel performance and throughput thanks to powerful three-phase technology.
- ▶ Longer operating times thanks to battery that can be quickly removed from the side or on-board charger (optional).
- ▶ Particularly robust construction for fatigue-free operation.
- ▶ 10 truck types, ranging from the M series to the compact EJC and the ESD for loads of up to 2 tons.
- ▶ Customisable thanks to numerous options for a wide range of application scenarios.



Easy and safe to manoeuvre: The safety control handle of pedestrian trucks.



Plenty of room for movement for the operator as well: The stand-on platform of the ERC 216z.



Easy intermediate charging thanks to on-board charger.

SERIES	SHORT HAUL						MEDIUM HAUL		LONG HAUL	
	EJC M ①	EMC ①	EJC 1-2 ①	EMD 1	EJD 1-2	EJG 1-2	ERC 2 ①	ERD 1-2	ESC 2-3	ESD 1-2
MODEL NAME	M 10 E M 10b E M 10 M 13 ZT	110 B10	110 112 112z 212 212z 212b 214 214z 214b 216 216z 216b 220 220z 220b	115i 118	120 222	106 108 110 112 212 214 216	212 212z 212b 214 214z 214b 214i 214zi 214bi 216 216z 216b 216i 216zi 216bi 220 220z 220b	120 220	214 214z 216 216z 316 316z	120 220
LIFT HEIGHT (MM)	1,540-3,300	1,540	2,800-6,000	600-1,520	2,905	2,500-2,800	2,800-2,900	1,660	2,800-2,900	1,660
CAPACITY (KG)	1,000-1,300	1,000	1,000-2,000	1,500-1,800	2,000-2,200	600-1,600	1,200-2,000	2,000	1,400-1,600	2,000
TRAVEL SPEED (KM/H)	5	5	5.5-6	6	6	5.2-6	8-9	9-14	9.1	9.1-12
LIFT SPEED (M/S)	0.22	0.16	0.15-0.25	0.3	0.25-0.3	0.2-0.25	0.18-0.25	0.32	0.23-0.24	0.22-0.39

① These models are available with Duplex mast (ZT), Monomast (E), support arm lift (z) or as wide track version (b).

Enhanced safety thanks to 3-sided protection and fixed platform

Extremely compact and highly manoeuvrable thanks to fully integrated lithium-ion battery.

Optimum energy efficiency for extremely long service life thanks to lithium-ion technology.

LI-ION
technology



EJC SERIES M **M10E | M10bE | M10 | M13 ZT**

The entry-level models for low-intensity, lightweight stacking tasks.

- ▶ For occasional short assignments.
- ▶ Maximum manoeuvrability even in tight environments.
- ▶ Fast and easy charging thanks to on-board charger.



EMC SERIES 1 **110 | B10**

For easy stacking tasks: Performance, ease of use and safety in a single truck.

- ▶ Maximum flexibility thanks to optional use as a work table.
- ▶ Fast and easy charging thanks to on-board charger.

SHORT HAUL



EJC SERIES 1-2 **110 | 112 | 112z**

| 212 | 212z | 212b | 214 | 214z | 214b | 216 | 216z | 216b | 220 | 220z | 220b

Maximum performance even for inexperienced operators. With numerous truck options for every purpose and every storage environment.

- ▶ Effortless, efficient operation thanks to electric drive and outstanding user-friendliness.
- ▶ Robust and reliable even under the toughest conditions.

EMD SERIES 1 **115i | 118**

The world's shortest universal forklift in its class, the EMD 115i with integrated lithium-ion battery.

- ▶ Maximum flexibility with integrated support arm lift.
- ▶ Fast and easy charging thanks to on-board charger.



EJD SERIES 1-2 **120 | 222**

These universal trucks combine the capabilities of low lift and stacker trucks.

- ▶ Greater productivity with the inclusion of two pallets in the double deck.

EJG SERIES 1-2 **106 | 108 | 110 | 112** **| 212 | 214 | 216**

With adjustable forks, obstacles are overcome effortlessly.

- ▶ Maximum stability on uneven ground thanks to large load wheels.
- ▶ Maximum manoeuvrability due to small truck length.

MEDIUM HAUL

**ERC SERIES 2**

212 | 212z | 212b
| 214 | 214z | 214b | 214i | 214zi | 214bi |
216 | 216z | 216b | 216i | 216zi | 216bi
| 220 | 220z | 220b

The electric pedestrian controlled truck with a folding or fixed stand-on platform combines the manoeuvrability of a pedestrian stacker with the comfort and speed of a ride-on.

- ▶ Maximum safety thanks to the four-wheel design, cushioned stand-on platform and permanent monitoring of the current load weight to warn of overload.
- ▶ Powerful three-phase technology ensures strong acceleration and high speeds with low consumption.

**ERD SERIES 1-2**
120 | 220

These universal trucks combine the capabilities of electric pallet and stacker trucks. As versatile as they are, they are equally suitable for double-deck loading and unloading of lorries as well as for transporting or stacking goods.

- ▶ Greater productivity by handling two Euro pallets simultaneously in double-deck mode.

LONG HAUL

**ESC SERIES 2-3**
214 | 214z | 216 | 216z | 316 | 316z

Electric sideways seated stackers offer the highest travel and acceleration performance over longer transport routes. With a very narrow width and a short aisle width, the ESC comes to the fore in particular when used in narrow storage areas and operating block bearings.

- ▶ Maximum manoeuvrability through compact dimensions.
- ▶ Powerful, innovative three-phase drive motor for maximum travel and acceleration performance.

ESD SERIES 1-2
120 | 220

Versatile electric ride-on and sideways seated stacker, ideal for lorry double-decker loading.

- ▶ Optimal visibility through side seat position.
- ▶ Greater productivity by handling two Euro pallets simultaneously in double-deck mode.

Low level order pickers for maximum picking performance.

Perfect interaction between man and machine: Intelligent assistance systems and operating concepts make order picking faster and more precise than ever before.

THE HIGHLIGHTS

- ▶ Fast and safe picking from the first rack level up to an order picking height of 5.30 meters.
- ▶ Robust construction for the toughest applications.
- ▶ Optional performance packages for performance improvement.
- ▶ Up to 30% more picks per hour with remote solutions easyPILOT Control and Follow.
- ▶ The perfect, individualised truck for every application scenario.



The perfect workplace with a variety of storage options.



Semi-automatic control of the ECE with easyPILOT.



Height-adjustable jetPILOT multifunction steering for automotive style driving.

SERIES	ECE 2	ECE 3	ECE 3	ECD 3	EKM 202
MODEL NAME	220 225	310	320	320	202
LIFT HEIGHT (MM)	125	750	750	700	3,000
CAPACITY (KG)	2,000–2,500	1,000	2,000	2,000	215
TRAVEL SPEED (KM/H)	9.5–12.5	11.5–12.5	9.5–12.5	9.5–12.5	8
FORK LENGTH (MM)	1,150–2,400	1,150	2,400	2,450	–



Order picking is really simple with easyPILOT: The ECE 225 follows automatically to the next picking station without the operator having to climb or drive.





ECE SERIES 2 220 | 225

Robust horizontal order picker with high level of travel comfort. Ideal for loads up to 2,500 kg.

- ▶ The classic amongst our order pickers. It represents optimal picking performance and balanced energy consumption.



ECE SERIES 3 310

The ECE 310 with ergonomic lift can lift loads up to 1,000 kg to an ergonomic back-friendly order picking height.

- ▶ Optionally with hydraulically raising stand-on platform for secure order picking in the second rack level.

ECE SERIES 3 320

Horizontal order picker with scissor lift for picking in back-friendly height. The fork length allows two pallets to be raised. Loads of up to 2,000 kg can therefore be raised to an ergonomic, back-friendly order picking height.

- ▶ Maximum throughput thanks to high acceleration and speed values.
- ▶ Best energy consumption on the market.

The **EKM 202** replaces the classic ladder up to the third rack level.



ECD SERIES 3 320

The truck can transport a previously picked pallet with its double-length forks on the initial lift, while another pallet is ergonomically picked on the mast lift.

- ▶ Increased throughput thanks to double picking quantity and reduced number of routes to goods issue.



EKM SERIES 2 202

The compact small parts order picker for reach heights up to 5.30 m is used for small quantities of goods, avoiding the need for pallets. The EKM 202 is also perfect for hanging price tags or for minor maintenance work such as changing ceiling lights.

- ▶ Automatic closing doors for maximum safety.
- ▶ Thanks to its compact dimensions, it is ideal for manoeuvring in narrow aisles and passing through low doors.
- ▶ With optional, generously designed and electrically adjustable shelf.

Medium/high level order pickers for picking rates at the highest level.

Optimum interaction between man and machine: Intelligent assistance systems and digital networking bring maximum efficiency and picking performance to your high-bay warehouse.

THE HIGHLIGHTS

- ▶ Fast and safe picking up to an order picking height of more than 14 meters.
- ▶ Numerous operating and assistance systems, safety options and various service packages for even greater efficiency and picking performance.
- ▶ Semi-automatic approach with warehouseNAVIGATION for up to 25 % increase in throughput.
- ▶ The perfect, individualised truck for every application scenario.

SERIES	EKS 1	EKS 2	EKS 3 4	EKS 3s 4s
MODEL NAME	110	210	310 412	310s 412s
AISLE WIDTH (MM)	3,000	3,000	3,000	From 1,100
ORDER PICKING HEIGHT (MM)	2,800–4,600	2,800–6,600	2,800–10,845	2,800–14,345
CAPACITY (KG)	1,000	1,000	1,000–1,200	1,000–1,200
TRAVEL SPEED (KM/H)	9–13	9–10	9–10	9–12
LIFT SPEED (M/S)	0.15–0.31	0.25–0.3	0.25–0.3	0.4–0.5



Connection to the warehouse management system with the Jungheinrich logistics interface.



Energy-saving three-phase technology for long periods of use.



The state-of-the-art control panel design of the EKS ensures maximum ergonomics.

The EKS 412s sets standards with maximum picking performance up to 14 meters in height.

Thanks to the integrated warehouseNAVIGATION system, the EKS 412s reaches its destination by the shortest route possible and in no time at all.

High travel and lift acceleration for maximum throughput.

LION
technology

The narrow frame construction gives the Series 2 maximum manoeuvrability.



EKS SERIES 1 **110**

With a travel speed of up to 13 km/h and a platform height of up to 3 meters, this is the ideal order picker for free movement up to the third rack level.

- ▶ Maximum flexibility thanks to order picking heights up to 4,600 mm.
- ▶ Particularly robust with shock-protected drive panel.



EKS SERIES 2 **210**

The energy-saving, free-travel 24-V model in Series 2 excels in wide-aisle warehouses thanks to its excellent ergonomics and picking performance, including order picking heights of over 6.5 metres.

- ▶ Ideal for order picking tasks in wide aisles.
- ▶ Slim and agile for improved performance in tight spaces.

Maximum performance
in the narrow aisle
in multi-shift operation
with the **EKS 412s**.



EKS SERIES 3 | 4 **310 | 412**

The efficient EKS 412 and EKS 310 medium/high-level order pickers are optimised for use in your warehouse with order picking heights of over 10 metres.

- ▶ Perfect for use in wide aisles.
- ▶ Maximum stability for safe and ergonomic operation.



EKS SERIES 3s | 4s **310s | 412s**

The Performance Series offers maximum picking performance and efficiency in narrow aisles up to 14 meters in height. Precise, fast and over the shortest route.

- ▶ Intelligent assistance and personal protection systems for more safety.
- ▶ Optimised operating concept with ergonomic design.
- ▶ Faster lifting and lowering speed for more picks per hour.

Electric tow tractors with trailers for efficient transport tasks.

Electric tow tractors with trailers as tow trains are highly efficient links in logistics and production supply.

THE HIGHLIGHTS

- ▶ Highly efficient due to the simultaneous transport of various loads.
- ▶ Up to 70 % energy savings when used as a tow train compared to forklifts.
- ▶ High towing capacity of up to 28 tons.
- ▶ For every application scenario, the perfect tow tractor with a wide variety of towing capacities and trailers.
- ▶ Competent, individual system consulting – from route planning to connection to control systems.



Thanks to three-phase AC technology, electric tow tractors are emission-free, quiet and powerful.



Comfortable, ergonomically designed and performance-enhancing workplace.



Automotive-style pedal arrangement on the EZS 7280.

SERIES	TILLER OPERATED TOW TRACTOR	RIDE-ON TOW TRACTOR			SIT-DOWN TOW TRACTOR		PLATFORM VEHICLE	TRAILER TOW TRAINS
	EZS	EZS	EZS	EZS	EZS	EZS	EZW	GTE
MODEL NAME	010	130	C40	350	570 580 590 5100	7280	515	106 212 312
TOW CAPACITY / LOAD IN KG	1,000	3,000	4,000	5,000	7,000–10,000	28,000	1,500 ©	600–1,200 ©
TRAVEL SPEED (KM/H)	5.4–6	9–10.5	8–12.5	8–12.5	7–18	12–25	18	–

© This information refers to the load.

Ideal for transporting heavy loads on the airport apron field: the EZS 7280.

With compact dimensions and a large steering angle, it masters even the tightest places.

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technology



EZS SERIES 0 **010**

The versatile mini-hauler is ideal for transporting small loads over short distances and in tight spaces for maximum loads of up to 1 ton.

- ▶ Ergonomic safety tiller arm.
- ▶ Maximum flexibility with the possibility of turning the truck on the spot.
- ▶ Easy and fast charging at any outlet through on-board charger.

EZS SERIES 1 **130**

With a width of just 600 mm, it is the ideal vehicle for particularly narrow and compact areas. By coupling several trailers, the loading areas can be varied for flexible and economical material handling.

- ▶ Maximum flexibility thanks to the small turning radius.
- ▶ Maximum efficiency thanks to powerful acceleration and high top speed.

EZS SERIES C **C40**

With its superelastic drive wheel, this versatile tow tractor with 4 tons of towing capacity offers optimum traction even on smooth industrial floors and uneven floors outdoors.

- ▶ Increased ground clearance for comfortable driving on uneven ground.

EZS SERIES 3 **350**

The high-performance EZS 350 electric tow tractor features a robust design for the toughest applications with tow loads up to 5 tons.

- ▶ Maximum safety when cornering thanks to the curveCONTROL steering angle-dependent assistance system.
- ▶ Outstanding handling and ergonomics.
- ▶ Maximum efficiency thanks to powerful acceleration and high top speed.



EZS SERIES 7 7280

With its enormous pulling power of 28 tons, the EZS 7280 comes into its own when transporting heavy loads over long distances and especially on ramps.

- ▶ Safe travel through automatic parking brake and hill start assist.
- ▶ Maximum flexibility thanks to small turning radius for tight spaces.
- ▶ Ergonomic cab.

EZS SERIES 5 570 | 580 | 590 | 5100

With their superelastic tyres these vehicles are suitable for indoor and outdoor use and pull heavy trailers up to 10 tons total weight.

- ▶ Maximum efficiency due to powerful three-phase motor.
- ▶ High level of travel comfort through cushioned suspension.



EZW SERIES 5 515

The compact and manoeuvrable EZW 515 electric platform truck can carry up to 1.5 tons on its loading area, making it suitable for almost any application area, both indoors and outdoors.

- ▶ Maximum efficiency through powerful acceleration and high top speed thanks to three-phase motor.
- ▶ High level of travel comfort through cushioned suspension.
- ▶ Version with and without cabin.



GTE 106 | 212 | 312

The compact E-frame trailer can be coupled as desired. This allows loading/unloading on both sides.

- ▶ Maximum safety thanks to directional stability even on long trains.
- ▶ Optimum ergonomics for efficient operation.

Our electric forklift trucks EFG. Energy for growth.

The EFG electric counter-balanced trucks combine performance and efficiency in a very impressive way.

THE HIGHLIGHTS

- ▶ Powerful lithium-ion technology or lead-acid battery with 2Shifts1Charge.
- ▶ Pure Energy: optimum efficiency through perfect co-ordination of original Jungheinrich components.
- ▶ High dynamic level and precise handling thanks to three-phase AC technology for drive and lift motors.
- ▶ Energy recovery through regenerative braking.
- ▶ Simple to control with intelligent operating concepts.
- ▶ The perfect, individualised truck for every application scenario.



An ergonomic and productivity-enhancing workplace in every respect.



Maintenance-free but extremely powerful: Lithium-ion technology for the EFG.



3 different controls are available for the individual workplace.

SERIES	EFG 1	EFG 2	EFG 3	EFG 4	EFG 5
MODEL NAME	110 110k 113 115	213 215 216 216k 218 218k 220	316 316k 318 318k 320	425 425k 430 430k S30	535k 540 540k 545 545k 550 S40 S50
TYPE	3 WHEEL	3 WHEEL	4 WHEEL	4 WHEEL	4 WHEEL
LIFT HEIGHT (MM)	2,300–6,500	3,000–7,000	3,000–7,000	2,900–7,500	2,846–7,320
CAPACITY (KG)	1,000–1,500	1,300–2,000	1,600–2,000	2,500–3,000	3,500–5,000
TRAVEL SPEED (KM/H)	12,5	16 ⊕	17 ⊕	20 ⊕	17–18 ⊕ ⊕
OVERALL LENGTH (MM)	2,773–2,935	2,924–3,145	3,140–3,248	3,446–3,617	3,805–4,102

⊕ Some of these models are available with a smaller wheelbase and turning radius (k).

⊗ Some of these models are available with higher capacity and larger tread (S).

Up to 20% less energy consumption thanks to the PureEnergy technology concept.

Electric parameter steering ensures a dynamic response that is suitable for the travel programme which has been selected.

Various safety options and intelligent assistance systems reduce the potential hazards in the warehouse environment.

Clever attachment options for use with almost all goods that need to be transported.

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EFG SERIES 1 **110 | 110k | 113 | 115**

With its compact vehicle dimensions, the smallest EFG series is extremely manoeuvrable and at the same time extraordinarily powerful up to 1,500 kg and a lift height of 6.5 meters.

- ▶ Ultra-compact 3-wheel truck.
- ▶ 180° turns possible on the spot.
- ▶ Only 990 mm truck width for maximum manoeuvrability.

EFG SERIES 2 **213 | 215 | 216 | 216k | 218 | 218k | 220**

The Series 2 is also ideally suited for tight storage environments up to 6.5 meters lift height and 2000 kg load capacity. With numerous equipment and safety options, these trucks can be perfectly adapted to your individual requirements.

- ▶ Very agile 3-wheel truck.
- ▶ 180° turns possible on the spot.
- ▶ High flexibility for every application.



EFG SERIES 3 **316 | 316k | 318 | 318k | 320**

The highly articulated suspension axle of this EFG series distributes the load to all 4 wheels and also absorbs rough road bumps. And all this with a capacity of 2,000 kg and a lift height of 6.5 meters.

- ▶ Agile with maximum stability and travel safety.
- ▶ Maximum stability due to high-mounted floating axle.



EFG SERIES 4

425 | 425k | 430 | 430k | S30

The 4 Series electric four wheel counterbalanced forklift trucks are suitable for a wide range of indoor and outdoor applications, with a capacity of up to 3,000 kg and a lift height of up to 7.5 meters, especially when using attachments.

- ▶ Maximum throughput with up to 10 % less energy consumption than competitor models.
- ▶ Top speed up to 20 km/h.
- ▶ S line for heavy loads with attachments.



EFG SERIES 5

**S35k | S40 | S40k | S45 | S45k
| S50 | S40 | S50**

The 4-wheel trucks are optimally designed for heavy-duty interior and exterior use and for using complex attachments. And all this with a capacity of up to 5,000 kg and a lift height of up to 7.5 meters.

- ▶ Optimum energy efficiency even in the most difficult applications.
- ▶ S line for heavy loads with attachments.

Our reach trucks. A blueprint for flexibility.

Compact, agile and intuitive to use. These precise all-rounders set standards in confined spaces.

THE HIGHLIGHTS

- ▶ Major space gains and maximum efficiency through reach mast technology.
- ▶ Productive working thanks to intuitive operation.
- ▶ Maximum safety through intelligent assistance systems.
- ▶ Fast, accurate and safe storage and retrieval on the rack.
- ▶ Optimum control of operating cycles through 180° and 360° steering.
- ▶ The perfect, individualised truck for every application scenario.



Jungheinrich reach trucks, such as this ETV 216, can be used universally.




A comfortable and, above all, safe workplace with the best all-round visibility.



Precise approach to the storage area with the help of intelligent assistance systems.

SERIES	ETV 1	ETV ETM 2	ETV ETM 3	ETV C	ETV Q	ETR
MODEL NAME	110 112	214 216 216i	318 320 325	C16 C20	Q20 Q25	230 235 340 345 335d
AISLE WIDTH (MM)	From 2,608	From 2,652	From 2,737	From 2,784	From 2,756	From 2,872
LIFT HEIGHT (MM)	4,550–7,100	4,550–10,700	4,250–13,000	4,550–7,400	4,250–10,700	7,595–11,430
CAPACITY (KG)	1,000–1,200	1,400–1,600	1,800–2,500	1,600–2,000	2,000–2,500	1,400–2,000
TRAVEL SPEED (KM/H)	11	14	14	12.2	14	14
LIFT SPEED (M/S)	0.48–0.70	0.48–0.81	0.38–0.64	0.32–0.7	0.35–0.64	0.70



The revolutionary design of the ETV 216i offers a terrific 360° visibility and a perfect view of the support arms and the load. With panoramic glass roof for optimum visibility and safety.

With 23% higher lift speed.

Significantly larger driver's cab with a wide range of adjustment options.

With fixed lithium-ion battery: Full power at all times. Also in multi-shift operation. Maintenance-free.

LI-ION
technology



ETV SERIES 1 110 | 112

Ultra-compact reach truck that can handle the tightest of warehouse environments.

- ▶ Particularly suitable for small aisle widths.
- ▶ Extremely agile due to compact dimensions.

ETV | ETM SERIES 2 214 | 216 | 216i

Also one of the most agile in its class. In confined spaces, it sets the standard with maximum control and maximum efficiency. The highlight of this series: The ETV 216i with a powerful built-in lithium-ion battery.

- ▶ The classic among reach trucks with high manoeuvrability and optimum energy efficiency.
- ▶ A load capacity of up to 1.6 tons ensures optimum handling performance.



ETV | ETM SERIES 3 318 | 320 | 325

With their extremely stable mast and heavy frame, the 3 series reach trucks lift loads to heights where other trucks give up. Here, the triple mast can make itself extremely small, for low headroom.

- ▶ Maximum handling capacity thanks to a load capacity of up to 2.5 tons and a lift height of up to 13 meters.



ETV SERIES C C16 | C20

The all-rounder for indoors and outdoors. In both scenarios, it can lift up to 2 tons to a lift height of 7.4 meters. In combined use, this can save the acquisition costs of another forklift truck.

- ▶ Designed for combined indoor and outdoor use.
- ▶ Superelastic tyres and a high ground clearance for different ground conditions.



ETV SERIES Q Q20 | Q25

The multi-way reach truck is particularly suitable for transporting and storing long goods in narrow aisles.

- ▶ Travels in any direction through the electronically controlled four-wheel steering.
- ▶ Five steering programs for optimum cube utilisation at the touch of a button.



ETR SERIES 2-3 230 | 235 | 340 | 345 | 335d

The reach trucks for easy and double-deep storage. The fork is moved back and forth by means of a scissor mechanism. The mast is firmly bolted to the frame and therefore allows the use of different support arms. These can be chosen so that even pallets with a width of up to 1,200 mm can be withdrawn at ground level between the load wheels.

- ▶ Outstanding residual capacity – even with double-deep stacking.
- ▶ Maximum throughput due to superior lift speed.
- ▶ Highest variance in the dimension between the support arms enables optimal adaptation to your storage requirements.

Narrow aisle high-performance carriers: High rack stackers.

Impressive travel and lift speeds plus intelligent technology for highest throughput with optimum cube utilisation.

THE HIGHLIGHTS

- ▶ Modular design with up to 5 million configuration options for every application scenario.
- ▶ Optimum connection to warehouse management systems through Jungheinrich logistics interface and RFID technology.
- ▶ Manual, semi-automated or fully automated operation.
- ▶ Storage and retrieval operations up to lifting heights of 18 metres.



Maintenance-free synchronous reluctance motors with the best efficiency in their class.



Vibration damping for greater safety and performance on uneven ground.



Greater productivity in less space with intelligent narrow aisle warehouse solution.

SERIES	EKX 4-5 ①	EFX 4	ETX 5
MODEL NAME	410 412 514 516 516k	410 413	513 515
LIFT HEIGHT (MM)	3,000–18,000	3,000–7,000	3,000–13,000
CAPACITY (KG)	1,000–1,600	1,000–1,250	1,200–1,500
TRAVEL SPEED (KM/H)	10.5–12	9	10.5
LIFT SPEED (M/S)	0.40–0.60	0.41	0.45–0.46

① Some of these models are available in the short version (k).



Up high in a confined space:
With lift heights of up to 18 meters.

Easy multi-shift operation
with high-performance lithium-ion technology.

Thanks to warehouseNAVIGATION,
the EKK 516 finds the most efficient
route to the destination by itself.

LI-ION
technology

Greater safety and travel comfort on uneven floors with Floor Pro.



High rack stackers can be continuously automated and are optimally equipped for every task up to 24/7 operation.

EKX SERIES 4-5 **410 | 412 | 514 | 516 | 516k**

The EKX sets new standards in the narrow aisle. It achieves true maximum performance during storage and retrieval and order picking up to a lift height of 18 meters. With numerous truck options and high modularity, it fits perfectly into any storage system and storage strategy.

- ▶ Maximum individuality thanks to over 5 million configuration options for every application.
- ▶ 7 individually selectable service packages to increase performance.
- ▶ Flexible expansion of the application areas, from manual to semi-automatic to fully automatic operation.

Perfectly geared to the needs of the driver:
The ergonomic workplace.



EFX SERIES 4 410 | 413

The EFX tri-lateral stacker can be operated in both guided and free-ranging mode. This makes it ideal for combined use in narrow aisles, wide aisles and in the apron field. Its front seat and laterally positioned mast allow unrestricted visibility of fork, load and route.

- ▶ **Maximum ergonomics thanks to optimally aligned controls.**
- ▶ **Integrated, handy steering wheel for precise and safe handling.**
- ▶ **Maximum safety through outstanding visibility.**



ETX SERIES 5 513 | 515

High rack stackers with swivel or telescopic forks set standards in terms of flexibility, profitability and ergonomics. Intelligent assistance systems also increase performance and safety. Thanks to their modular system, these trucks can be adapted to any warehouse and logistics strategy.

- ▶ **Maximum individuality thanks to over 5 million configuration options for every application.**
- ▶ **Camera/monitor system for effective storage and retrieval of pallets at great lift heights.**
- ▶ **Expandable to automatic mode for maximum efficiency.**
- ▶ **At 13 meters, the largest lift height on the market.**



Power on demand.

Rental solutions for
every requirement,
with over 60,000 trucks
available worldwide.

Short Term Rental: Whenever things get tight, our rental trucks are the right choice. Always the right forklift truck at the right time and in the right place.


Long Term Rental: When it's more about the pure intralogistic benefit rather than owning a truck, our flexible rental models are just the thing.

Li-ion Performance Rental: Li-ion batteries and chargers as a fully integrated rental solution.

Rental Fleet Management: Make your forklift fleet flexible to combat changing scenarios. More security and transparency at reduced costs.

Power Buy the Hour: Pay only for the time that is actually required with our attractive pay-per-use packages.

Financing: Flexibility also when it comes to purchasing the truck at the end of the rental period: From instalments to leases with a purchase option.



Forklift trucks, racks, storage facilities, chargers and batteries. Complete rental solutions in the warehouse have long been reality.

RENTING VERSUS BUYING

The sharing economy is not based on rigid ownership but on the flexible use of goods. This thinking is revolutionising the entire world of intralogistics.

Forklift rental is not only worthwhile to cover short-term, seasonal requirements or cost-effective deployment in changing locations. To be able to use the required power with the right vehicle, at the right time and in the right place on demand, is becoming increasingly attractive for the efficient operation of a warehouse. Investing in processes and auxiliary equipment that are not directly related to the core business of the company is often not economical. Rental frees up capital for further business growth.

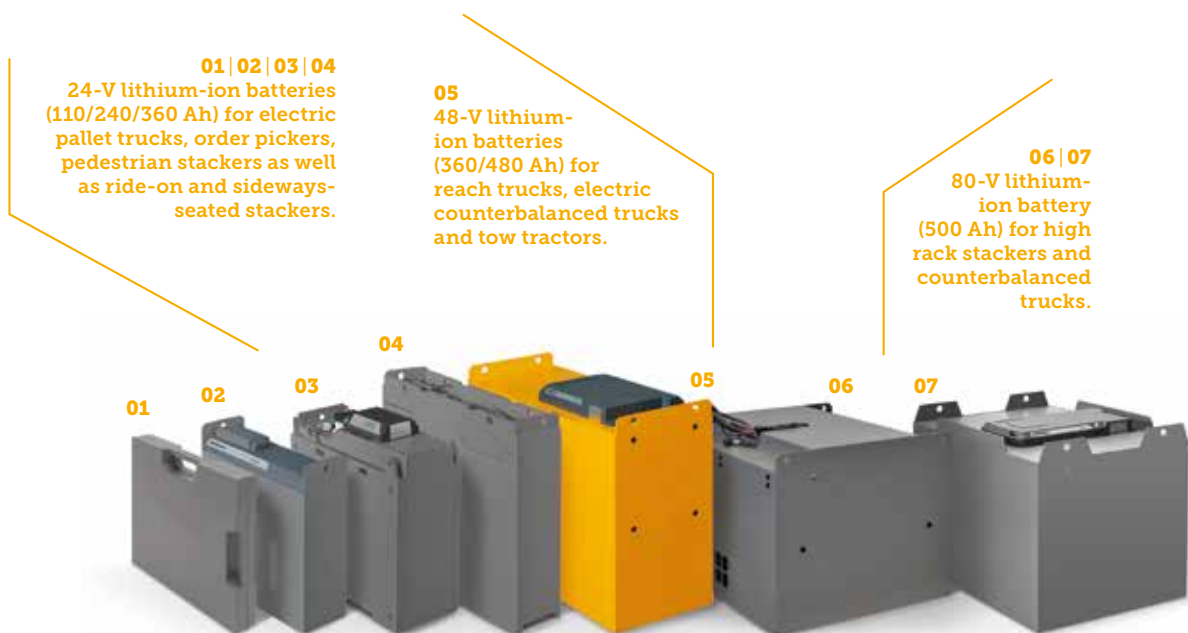
THE HIGHLIGHTS

- ▶ Rapid availability of all vehicles.
- ▶ Always on the cutting edge of technology.
- ▶ The entire Jungheinrich product portfolio also available as a rental solution.
- ▶ No risk due to potential truck changes and flexible returns.
- ▶ No overcapacity.
- ▶ More capital for your core business.
- ▶ Flexible and transparent billing models.

Packing a whole lot of power.

The efficient use of energy has high optimisation and savings potential. Above all: Lithium-ion power.

Efficient energy use for you means the reduction of your total costs, higher ranges, continuous availability of the trucks, zero emissions and a positive energy balance. To ensure all this, we are the only provider that not only develops and produces the trucks and control modules in-house, but also the software, batteries and charging technology. This way, all components function in perfect harmony and reach their full potential.



Lithium-ion technology: Continuous performance, ultra-fast charging times and zero maintenance make lithium-ion batteries by far the most enduring energy source. The trucks can be used almost non-stop, power is always fully available, and with an extremely long service life, Jungheinrich offers a 6 month satisfaction guarantee. In addition, we offer you our 5 year warranty on all Li-ion batteries. If you consider the TCO, it's worth making the transition – and in most cases a li-ion battery can be retro-fitted, regardless of operating hours.

THE HIGHLIGHTS

- ▶ Up to 20 % less energy consumption than lead-acid batteries.
- ▶ Charges in just 30 min. to 50 % and in 80 min. 100 % charged.
- ▶ More endurance in multi-shift operation.
- ▶ No maintenance.
- ▶ 3 times longer service life than lead-acid batteries.



LI-ION
technology



Full li-ion power.
Full conversion right.

5 YEARS
GUARANTEE
ON LI-ION BATTERIES



Benefit from proven technology
in 24 V, 48 V and 80 V versions.

Lead-acid batteries: Robust battery technology for strong performance and maximum reliability – our closed standard lead-acid batteries are available in 24 V, 48 V and 80 V. We rely on liquid electrolyte and the proven tube plate technology.

TWO SHIFTS – ONE CHARGE. GUARANTEED.

With 2Shifts1Charge the trucks are able to complete two shifts at a time, without having to have their batteries replaced or recharged. You save valuable time, valuable energy and at the same time reduce operating costs. This is achieved by the highly efficient control technology, ingenious energy management and state-of-the-art motor technology. Our newly developed synchronous reluctance motor in conjunction with lead-acid batteries converts around 93 percent of the energy into power, reducing energy loss by half.



**Two shifts without battery
change: Only Jungheinrich
guarantees this.**



Jungheinrich chargers come largely from in-house development and production.

01

Our on-board chargers work with 230 volts for Europe and many other countries and 115 volts for North America.



02

The flexible all-purpose charger SLH 300/300i can recharge both li-ion as well as lead-acid batteries.



03

The ETV 216i with its integrated lithium-ion battery on the stationary charger.



Stationary chargers: Whether it's for highly efficient lithium-ion batteries or conventional lead-acid batteries – at Jungheinrich you will find the right charger for every battery technology. It guarantees the maximum life and performance of your battery and the optimal availability of your trucks. Whether this is for one, two or three-shift operation, in light, medium or heavy duty, with or without intermediate charge. The Jungheinrich SLH 300/300i high-frequency charger and our SLT 150 charger with transformer technology are suitable for all applications with 24, 48 and 80 volts.

On-board chargers: The high-frequency technology ensures a gentle charge, for all battery types. More than 60 years of experience with electric drives have gone into the development of our on-board chargers. They are best suited for use without battery replacement, also as an accompanying device. They are easy to handle: At the end of the shift or in between, the truck can easily be connected to a conventional power outlet, anywhere in the world.



Battery, charger service and replacement batteries for your electric industrial trucks.

Energy management: Electrically operated industrial trucks must be permanently energised to ensure that all work processes in the warehouse are cost-efficient. We have a comprehensive service package for the electrification of your vehicles: From providing replacement or rental batteries to care tips, status inspections via battery check to battery maintenance. The Jungheinrich charger service ensures the functionality of your chargers so that your batteries are not damaged during charging cycles and will be fully operational in the long term.

Energy consulting: For an easy transition to our lithium-ion technology, we can carry out an integrated energy consultation at your premises. Our area sales managers are also on hand during the implementation phase: From the retrofitting of individual trucks to the conversion of entire truck fleets.

THE HIGHLIGHTS

- ▶ Our holistic energy management ensures safety in your warehouse and the performance of your trucks.
- ▶ Take advantage of our comprehensive energy consulting and simply switch to our high-performance lithium-ion power.

Conveyor technology.

Innovative pallet and container conveyor technology for new plants and existing installations brings greater productivity into your warehouse.



Container conveyor technology

Automatic container conveyor technology is the key to intelligent warehouse automation. The focus here is on the conveying, sorting, inward and outward transfer as well as the buffering and stowage of goods. In conjunction with the Jungheinrich Warehouse Management System, this will raise your material flow to a higher level and automate your overall process.

- ▶ Flexible transport of containers, boxes, trays and products up to 50 kg.
- ▶ Fast work processes with transport speeds of up to 1.50 m/s.



Pallet handling technology

Thanks to its modular design, our pallet handling technology can be tailored precisely to your material flow requirements. Whether roller, belt or chain conveyors, transfer cars, lifting and rotary tables or belt lifters – your profitability and productivity are always the focus when selecting the right components.

- ▶ Modular design of the systems allows flexibility for standard applications or more complex requirements.
- ▶ Pallet conveying speed of 0.45 m/s for high throughputs.



Flexible warehouse automation for highly efficient intralogistics processes, perfectly controlled by our Warehouse Control System.

Efficient bridging of long distances and innovative conveyor and distribution solutions in the smallest of spaces.

Synchronised with in-house control technology for the highest performance of the material flow.

Automated Guided Vehicles.

The heart of an automated warehouse: Well-trieved standard vehicles supplemented with automation components and controlled by intelligent software.

Automated guidance on a reliable basis.

Automated guided vehicles (AGVs) handle repetitive tasks with large handling volumes particularly safely and efficiently. The basis for this are tried-and-tested standard vehicles, which we individually adapt to your warehouse requirements. Integration into existing warehouse structures is very simple, subsequent layout changes can be flexibly implemented. And to avoid downtime in the launch phase of an AGV in your warehouse, we simulate the optimal routes in advance and thoroughly test the hardware and software. As a result, you achieve maximum process reliability right from the start – even in mixed operations mode. Extensive safety sensors protect people, load and machines.



ERE 225a

The ideal automated vehicle for transporting heavy loads on ground level and particularly efficient for multi-pallet transport.

- ▶ With a capacity of up to 2.5 tons.
- ▶ Long forks for multiple pallet transport.

EZS 350a

The driverless tow tractors take the strain off your personnel and ensure highly efficient processes.

- ▶ With a tow capacity of up to 5 tons.
- ▶ Use already existing routes.



EKS 215a

This automated vehicle is ideal for transporting special load carriers and closed pallets thanks to its cantilevered forks.

- ▶ With a lift height of up to 6 meters and a load capacity of up to 1.5 tons.



ERC 213a | 217a

The ideal Automated Guided Vehicle for transport applications even in confined spaces and in narrow aisles.

- ▶ With a lift height of up to 3.5 meters and a capacity of up to 1.7 tons.
- ▶ Wide range of applications thanks to compact design.

With personal protection scanner installed in the drive direction.

The EZS 350a accurately transports loads to millimeter precision thanks to laser navigation.

Laterally mounted laser scanners for predictive recognition of objects.

Also available with lithium-ion technology for even more power





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